

CLAIMS

1. An apparatus for enclosing a logic chip, comprising:

a substrate having a surface adapted to receive the logic chip mounted thereon;

5 and

a mold cap disposed upon said substrate, said mold cap extending at least partially over said logic chip and including at least one extension of a preselected size and shape extending at least partially into a corner section of said substrate.

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2. The apparatus of claim 1, wherein said extension is a rib structure.

3. The apparatus of claim 1, wherein said extension is a radiused structure.

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4. The apparatus of claim 1, wherein said extension comprises a full radius corner of said mold cap.

5. The apparatus of claim 1, including a plurality of solder balls positioned on a bottom surface of the substrate spaced from an edge of the logic chip.

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6. A plastic ball grid array assembly comprising:

a substrate having a generally polygon shape defining at least one corner section;

a mold cap including at least first and second sections, said first section comprising a generally polygon shaped main body portion covering a portion of said substrate, and said second section comprising an extension of said first section positioned adjacent said corner section of said substrate; and
5 a logic chip mounted on said substrate and being at least partially covered by the first section of the mold cap.

7. The apparatus of claim 6, wherein said extension is a rib structure.

10 8. The apparatus of claim 6, wherein said extension is a radiused structure.

9. The apparatus of claim 6, wherein said extension comprises a full radius corner of said mold cap.

15 10. The apparatus of claim 6, including a plurality of solder balls positioned on a bottom surface of the substrate spaced from an edge of the logic chip.

11. A method for enclosing a logic chip, comprising:

mounting the logic chip on a polygon shaped substrate; and

20 forming a mold cap on said substrate extending at least partially over said logic chip and into a corner section of said substrate.

12. The method, as set forth in claim 11, wherein the act of forming a mold cap includes forming a rib structure extending into said corner section of said substrate.

13. The method, as set forth in claim 11, wherein the act of forming a mold cap includes forming a radiused structure extending into said corner section of said substrate.

14. The method, as set forth in claim 11, wherein the act of forming a mold cap includes forming a full radius corner extending into said corner section of said substrate.

15. The method, as set forth in claim 11, including placing a plurality of solder balls on a bottom surface of the substrate placed from an edge of the logic chip.